DOCUMENT RESUME

ED 427 297 CS 013 422

AUTHOR Moustafa, Brenda Martin
TITLE Content Area Reading: Summary of Reference Papers.
PUB DATE 1999-00-00
NOTE 14p.
PUB TYPE Guides - Non-Classroom (055)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Content Area Reading; Elementary Education; *Reading Comprehension; *Reading Skills; *Reading Strategies; *Student Needs; Teacher Role; Text Structure
IDENTIFIERS *Expository Text

ABSTRACT

This paper examines the problem of content reading by elementary school age children and gives teachers advice to facilitate learning of expository text. Armbruster, Anderson, and Ostertag (1987) identified some of the difficulties students have with content reading to be lack of interest, lack of motivation, and insufficient prior knowledge. These same researchers concluded that students often struggle with content material because they are not familiar with the structure of expository text; hence students need guidance in understanding expository text. Some effective strategies to teach content area reading are: use of prior knowledge and background knowledge; instruction about text structure; and comprehension monitoring, student-generated questions, summarizing, and reciprocal teaching. To help students become more ready to "read to learn," teachers in primary grades should begin to expose students to expository text. Upper grade teachers need to facilitate students in the transition from "learning to read" to "reading to learn" by helping them become familiar with the different purposes and structures of expository texts. Not only will teaching strategies to read content material help improve test scores and grades, but it will also help students learn the skills needed to participate fully in society. (NKA)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 427 297

Content Area Reading:

Summary of Reference Papers

Brenda Martin Moustafa
California State University, Long Beach
EDEL 695
Dr. Lass
Spring 1999

BEST COPY AVAILABLE

CS 013422

Table of Contents

INTRODUCTION 3

CONTENT READING 4

Challenges Students Have with Content Material 4

Lack of Interest, Motivation, and Prior Knowledge 4

Structure of Expository Text 5

Summarizing 8

Effective Strategies to Teach Content Reading 8

Prior Knowledge and Background Knowledge 8

Instruction About Text Structure 9

Comprehension Monitoring, Student-generated Questions, Summarizing, and Reciprocal Teaching 10

CONCLUSIONS 11

Challenges Students Have with Content Material 11

Effective Strategies to Teach Content Reading 11

RECOMMENDATIONS 12

REFERENCES 13

Introduction

Recent news reports publicize the fact that reading scores in the state of California are some of the lowest nationwide. To compare reading scores across schools, districts, states, and the nation, standardized test scores are commonly compared. It is assumed that by the fourth grade students are reading to learn. Thus, a large component of the reading tests on standardized tests for students in the fourth grade and above include reading comprehension in the content area. Unfortunately, these test scores reflect that students are not succeeding at reading for comprehension in the content area.

Teachers face a challenge to find effective strategies to help students read in the content area. Not only do teachers need to help students improve in this area so that standardized test scores improve, but teachers need to help students understand the content material they read for such subjects as math, science, and social studies. Furthermore, educators must be aware of the significance of being able to read content material in our daily lives. Beck and McKeown (1991) explain the importance of being competent in reading content material:

> Interpreting and applying information from magazine articles, newspaper editorials, travel guides, ballots, and a multitude of forms and memos are tasks in which productive individuals engage daily. To participate fully in society, students need to become adept at the content and structure of expository text (p. 482).

Since teachers are expected to help their students succeed, they must assist students in becoming successful at reading content material. To do so effectively, it is essential that the teacher become aware of the challenges faced by students when reading

content material. Educators must also become familiar with effective strategies to teach content reading.

Content Reading

Challenges Students Have with Content Material

Reading content material is not easy for children. Often times, teachers are not aware of the difficulties students have when reading content material. Also, many subject area teachers believe that their job is to teach content, not reading. According to Armbruster, Anderson, and Ostertag (1987), "Although the empirical evidence is weak, experts contend that children generally have more difficulty reading expository than narrative text" (p. 332). Numerous reasons have been identified as to why students have difficulty with expository text.

Lack of Interest, Motivation, and Prior Knowledge

Armbruster, Anderson, and Ostertag (1987) identify some of the difficulties students have with content reading to be lack of interest, lack of motivation, and insufficient prior knowledge. Research by Beck and McKeown (1991) also acknowledges students often lack the prior knowledge to understand the text. Their research expands on this idea by addressing the fact that content material is often poorly written and assumes student familiarity with the content. For example, in analyzing social studies textbooks, Beck and McKeown (1991) found that "many ideas and events portrayed in the books were beyond a young student's grasp because the texts assumed unrealistic levels of knowledge" (p. 484). Beck and McKeown (1991) expand on the challenges encountered by students when reading unfamiliar material by explaining

> In order for information to be understood, a learner needs to be able to connect new information with what is already known. Thus, to be effective, an expository text must strike a balance between what a learner knows and does not yet know. If what a learner knows is not sufficient background for him/her to be able to understand the target ideas in the text, then reading comprehension of the material may be out of reach (p. 484).

Often times, the expository text assumes too much prior knowledge and the teacher fails to address this lack of knowledge. As a result, students read the content material, but don't comprehend what they read.

Structure of Expository Text

Research by Armbruster, Anderson, and Ostertag (1987) and Beck and McKeown (1991) conclude that students often struggle with content material because they are not familiar with the structure of expository text. Beck and McKeown (1991) explain that student familiarity with expository text structure helps students to comprehend the material. One reason why students are unfamiliar with the structure is that they are not exposed to expository text. For example, Beck and McKeown (1991) cite research that found:

> In one project where 100 hours of literacy periods in second- and sixth-grade literature-based classrooms were observed (Hiebert & Fisher, 1990), not a single instance occurred during which teachers modeled strategies with expository text or read from expository text (p. 482).

Many teachers have a tendency to use narrative text. Therefore, students are not shown strategies to read and understand expository text (Beck & McKeown, 1991).

In addition to not being familiar with the expository text structure, students often "lack sensitivity to text structure – to the way the ideas in texts are organized" (Armbruster, Anderson, & Ostertag, 1987, p. 332). According to Armbruster, Anderson, and Ostertag (1987) and many others "Many current theories of reading comprehension assume, at least implicitly, that skilled readers automatically abstract a higher-order structure of text (Meyer, 1975; Rumelhart & Ortony, 1977; van Dijk & Kintsch, 1983)" (p. 332). Skilled readers have the ability to form macrostuctures for a text. Armbruster, Anderson, and Ostertag (1987) explain that the macrostructure represents the main point of the text organized into a coherent whole. "The macrostucture guides encoding, recall, and reproduction of the essential point of the text. Formation of macrostructures is thus a prerequisite for success in tasks involving global comprehension and meaningful learning" (Armbruster, Anderson, & Ostertag, 1987, p. 332).

Many students struggle with forming macrostructures for expository text (Armbruster, Anderson, & Ostertag, 1987). Since students are not exposed to expository text, many students lack the skills to understand the structure of expository text. Students need guidance in understanding expository text structure. This is because "expository texts lack an important structural ingredient that makes a narrative text easier; that is, there is no overarching framework that a reader can use to organize and relate the information in the text" (Beck & McKeown, 1991, p. 483). Beck and McKeown (1991) note that many forms of expository text lack coherence. "Coherence refers to the extent to which the sequencing of ideas in a text makes sense and the extent to which the language used to present those ideas makes the nature of the ideas and their relationship apparent" (Beck & McKeown, 1991, p. 484). Expository text does not have predictable

structure, thus students find it difficult to see patterns and organize the content into comprehensible bits. "An expository text is structured to fit its communicative purpose, and thus its structure is derived from its purpose" (Beck & McKeown, 1991, p. 483). The purposes that formulate the structure can be cause/effect, comparison/ contrast, problem/solution, and description (Beck & McKeown, 1991). Additionally, an expository text can have one or more purposes. As a result, more than one structure can be used in a given text. This complexity of structure makes it difficult for students to identify the main idea. According to Armbruster, Anderson, and Ostertag (1987), "children may have difficulty forming macrostructures because they have trouble identifying important information or finding the main idea in expository text" (p. 332).

Studies have demonstrated that when students become aware of the author's text structure, their recall is better. For example, Armbruster, Anderson, and Ostertag cite research by Meyer, Brandt, and Bluth (1980) that concludes:

> skilled ninth-grade readers tended to use the author's top-level structure in organizing their free recalls of expository text, whereas readers with low comprehension skill did not. Furthermore, readers who employed the strategy of using the text's top-level structure recalled more information than those who did not (p. 332).

Armburster, Anderson, and Ostertag (1987) also cite a study by Taylor (1980) which found that ""More sixth-grade good readers organized their delayed recalls according to the higher-order text structure than did sixth-grade poor readers or fourth-grade poor readers" (p. 333).

Summarizing

Armbruster, Anderson, and Ostertag, (1987) conclude that students have difficulties summarizing content material. Armbruster, Anderson, and Ostertag acknowledge "that sensitivity to the organization of ideas in text- and hence to the relative importance of information – is related to comprehension and memory" (p. 332). Armbruster, Anderson, and Ostertag (1987) cite a study by Taylor (1985) that compared the ability of college and sixth-grade students to summarize passages from social studies textbooks. "Compared to college students, sixth-grade students had difficulty understanding important ideas and/or including these ideas in either oral or written summaries" (p. 333).

Effective Strategies to Teach Content Reading

In recent years, research in the area of reading has focused on effective strategies that can help students to improve comprehension of content material. For example, Taylor and Frye (1992) investigated different strategies to improve comprehension in the intermediate grades. Armbruster, Anderson, and Ostertag (1987) also identified and investigated strategies to help fifth-grade students understand and summarize expository text structure. Beck and McKeown (1991) conducted a study to investigate "the match between fifth-graders' background knowledge and the information assumed by the text" (p. 484).

Prior Knowledge and Background Knowledge

In an investigation to study how the content in a fifth-grade social studies text matched with the students' background knowledge, Beck and McKeown (1991) concluded that textbooks "seem to assume that this information is already under student

control"(p. 485). Often, social studies texts assume students have a great prior knowledge of material being studied, even though the material has not been studied formally. As a result, the text content is weak. Thus, students don't comprehend the material because not enough background material is provided. "Current elementary textbooks do not provide enough content about which to think about (Beck & McKeown, 1991, p. 489).

Beck's and McKeown's (1991) study did find that "both coherence of text and background knowledge contributed to comprehension in independent ways" (p. 486). They recommend strategies to help provide background to students so they understand content. Beck and McKeown (1991) recommend that teachers "Go for depth and make connections" (p. 486). They advise teachers to cover less material, but elaborate on the material so students really understand. For example, teachers can use trade books in addition to the textbook so students receive more background information. Teachers can "draw from tradebooks the content that provides a basis for which students can construct understanding" of events (Beck & McKeown, 191, p. 487).

Instruction About Text Structure

Armbruster, Anderson, and Ostertag (1987) identify four ways to help students understand the structure of expository text. "One approach to fostering awareness of text structure is to teach readers to make some concrete representation of the organization of ideas"(p. 333). A second way is "to teach readers to use typographical cues (headings, subheadings, and paragraphs) as indices of text structure" (p. 333). A third way is "to provide instructions in one or more conventional text structures" (p. 333). A fourth strategy that Armbruster, Anderson, and Ostertag (1987) studied in a case study with

fifth-graders is to teach students to recognize a text structure and use the text structure to write summaries. This fourth strategy was found to be quite effective. "Fifth-grade students were successfully taught to form a macrostructure for problem/solution textbook passages read independently, as assessed by both an essay question over main points and a summarization task" (Armbruster, Anderson, & Ostertag, 1987, p. 345). The results "suggest that direct instruction of a conventional text structure can facilitate formation of a macrostructure for that type of a text (Armbruster, Anderson, & Ostertag, 1987, p. 345).

Comprehension Monitoring, Student-generated Questions, Summarizing,

Taylor and Frye (1992) identify a number of strategies that have been found to be effective in helping students with reading comprehension. One method is comprehension monitoring. This strategy "involves readers becoming cognizant of whether or not they understand what they are reading" (Taylor & Frye, 1992, p.39). In comprehension monitoring, students locate "sources of comprehension failure and using appropriate fix-up strategies to improve reading comprehension which has faltered" (Taylor & Frye, 1992, p.39). Also, Taylor and Frye (1992) discuss how "self-questioning or generating questions for someone else to answer are methods which have been found to improve" reading comprehension (p. 40). Furthermore, Taylor and Frye (1992) cite different researchers who identify direct instruction in summarizing important ideas to be effective in improving intermediate-grade students' comprehension of expository text.

Reciprocal Teaching

A last strategy Taylor and Frye discuss and research is the reciprocal teaching method originally designed by Palinscar and Brown (1984). This method "makes use of four effective strategies: self-questioning, summarizing, clarifying (self-monitoring) and

predicting... Students take turns "being teacher" as they lead the others in the group in the activities of questioning, summarizing, clarifying (comprehension monitoring), and practicing" (p. 40).

Conclusions

Challenges Students Have with Content Material

Students have difficulties comprehending expository text. As a result, their comprehension of content material is poor. Beck and McKeown (1991) and Armbruster, Anderson, & Ostertag (1987) have investigated reasons why students have difficulty with comprehension of content reading material. They have found that students lack interest, motivation, and prior knowledge. Textbooks often assume prior knowledge and don't provide enough background knowledge in the text content. Furthermore, students are not exposed to expository text. As a result, they are not familiar with, nor do they know how to identify, the complex structures of expository text. Since students struggle with understanding the text structures of content material, they have difficulties identifying the main ideas and summarizing.

Effective Strategies to Teach Content Reading

There are strategies that have been found to be effective in helping students become more proficient at reading and comprehending content materials. Teachers need to become familiar with and use these strategies so they can help their students to succeed at comprehending content reading. A strategy Armbruster, Anderson, and Ostertag (1987) discuss is how making students aware of the complex structures of expository texts can help students to recall, understand the main idea, and summarize. Beck and McKeown (1991) explain how using cohesive texts, providing background knowledge,

including tradebooks, and helping students make connections are effective strategies that help students to better understand content material. Taylor and Frye (1992) identify effective reading comprehension strategies to be comprehension monitoring, student-generated questions, summarizing, and reciprocal teaching.

Recommendations

Educators need to remember that students are not usually exposed to expository text until later grades. Therefore, teachers cannot assume that students understand how to read and comprehend content material. To help students become more ready to "read to learn", teachers in primary grades should begin to expose students to expository text. Upper grade teachers need to facilitate students in the transition from "learning to read" to "reading to learn". For example, upper grade teachers should help students to become familiar with and understand the different purposes and structures of expository texts. These instructors should also model how to summarize content material. Teachers cannot assume that students know strategies to effectively read and comprehend expository text. Nor can teachers of content areas assume that teaching content is their only responsibility. Their responsibility is to help students learn strategies to understand the content material they are reading. Teachers need to become familiar with and use these strategies so they can help their students to succeed at comprehending content reading. Not only will teaching strategies to read content material help improve test scores and grades, but it will also help students learn the skills needed to participate fully in society.

References

Armbruster, Bonnie B., Anderson, Thomas H., & Ostertag, Joyce. (1987, Summer). Does text structure/summarization instruction facilitate learning from expository text? *Reading Research Quarterly* (22) 3, 331-346.

Beck, Isabel L., & McKeown, Margaret G. (1991, October). Research directions: Social studies texts are hard to understand: Mediating some of the difficulties. *Language Arts* (68), 482- 490.

Taylor, Barbara M. & Frye, Barbara J. (1992). Comprehension strategy instruction in the intermediate grades. *Reading, Research and Instruction* 32 (1), 39-48.